

What is Claimed is:

1. A medium voltage vacuum circuit interrupter comprising:  
a first terminal;  
a second terminal;  
a vacuum switch comprising a vacuum envelope containing a fixed contact assembly and a movable contact assembly movable between a closed circuit position in electrical communication with the fixed contact assembly and an open circuit position spaced apart from the fixed contact assembly, said fixed contact assembly electrically interconnected with said first terminal;  
a flexible conductor electrically connecting said movable contact assembly with said second terminal;  
an operating mechanism moving said movable contact assembly between the closed circuit position and the open circuit position; and  
an elongated housing including a first end supporting said first terminal and an opposite second end supporting said second terminal, said housing enclosing said vacuum switch, said flexible conductor and said operating mechanism.
2. The medium voltage vacuum circuit interrupter of Claim 1 wherein said elongated housing has an opening; and wherein said operating mechanism includes an operating handle, which protrudes through the opening of said housing.
3. The medium voltage vacuum circuit interrupter of Claim 2 wherein said operating mechanism includes an erosion indicator operatively associated with said vacuum envelope.
4. The medium voltage vacuum circuit interrupter of Claim 1 wherein said operating mechanism is a single-step operating mechanism.
5. The medium voltage vacuum circuit interrupter of Claim 1 wherein said operating mechanism includes a current sensor sensing current passing between said movable contact assembly and said second terminal, and a trip unit responsive to said sensed current to move said movable contact assembly from the closed circuit position to the open circuit position.

6. The medium voltage vacuum circuit interrupter of Claim 5 wherein said elongated housing has an opening; and wherein said trip unit includes a wireless communication port, which protrudes through the opening of said housing.

7. The medium voltage vacuum circuit interrupter of Claim 1 wherein each of said first and second terminals includes a termination structured to electrically connect to a line power cable or a load power cable.

8. The medium voltage vacuum circuit interrupter of Claim 1 wherein each of said first and second terminals includes a connector structured to electrically connect to a line power bus or a load power bus.

9. The medium voltage vacuum circuit interrupter of Claim 1 wherein said elongated housing is generally tubular shaped including a first opening at the first end and a second opening at the second end; and wherein said first and second terminals include a first member, which is supported by said generally tubular shaped elongated housing at one of the first and second openings thereof, and a second member, which is normal to said first member.

10. The medium voltage vacuum circuit interrupter of Claim 9 wherein each of said first and second terminals is structured to electrically connect to a line power cable or a load power cable.

11. The medium voltage vacuum circuit interrupter of Claim 1 wherein said elongated housing includes an elongated insulating cylindrical portion housing said vacuum switch, said flexible conductor and said operating mechanism, and also includes two conical insulating end portions covering said first and second terminals.

12. The medium voltage vacuum circuit interrupter of Claim 1 wherein said elongated housing includes first and second openings; and wherein said first and second terminals protrude through said first and second openings, respectively, of said elongated housing.

13. The medium voltage vacuum circuit interrupter of Claim 1 wherein said elongated housing has an opening; wherein said operating mechanism is a single-step operating mechanism including an operating handle, which protrudes through the opening of said housing.

14. The medium voltage vacuum circuit interrupter of Claim 1 where said operating mechanism is a linear operating mechanism.

15. A multi-pole medium voltage vacuum circuit interrupter comprising:

a plurality of circuit interrupter poles, each of said circuit interrupter poles comprising:

a first terminal;

a second terminal;

a vacuum switch comprising a vacuum envelope containing a fixed contact assembly and a movable contact assembly movable between a closed circuit position in electrical communication with the fixed contact assembly and an open circuit position spaced apart from the fixed contact assembly, said fixed contact assembly electrically interconnected with said first terminal;

a flexible conductor electrically connecting said movable contact assembly with said second terminal;

an operating mechanism moving said movable contact assembly between the closed circuit position and the open circuit position;

an elongated housing including a first end supporting said first terminal and an opposite second end supporting said second terminal, said housing enclosing said vacuum switch, said flexible conductor and said operating mechanism; and

means for linking said operating mechanism to another operating mechanism of another one of said circuit interrupter poles.

16. The multi-pole medium voltage vacuum circuit interrupter of Claim 15 wherein said operating mechanism includes a current sensor sensing current passing between said movable contact assembly and said second terminal, and a trip unit responsive to said sensed current to move said movable contact assembly from the closed circuit position to the open circuit position.

17. The multi-pole medium voltage vacuum circuit interrupter of Claim 16 wherein said means for linking includes an electrical cable connecting said trip unit to another trip unit of another one of said circuit interrupter poles.

18. The multi-pole medium voltage vacuum circuit interrupter of Claim 16 wherein said means for linking includes an infrared transceiver connecting said trip unit to another trip unit of another one of said circuit interrupter poles.

19. The multi-pole medium voltage vacuum circuit interrupter of Claim 15 wherein said elongated housing has an opening; wherein said operating mechanism includes an operating handle, which protrudes through the opening of said housing; and wherein said means for linking includes a mechanical linkage connecting said operating handle to another operating handle of another one of said circuit interrupter poles.

20. The multi-pole medium voltage vacuum circuit interrupter of Claim 15 wherein each of said first and second terminals includes a termination structured to electrically connect to a line power cable or a load power cable.

21. The multi-pole medium voltage vacuum circuit interrupter of Claim 15 wherein each of said first and second terminals includes a connector structured to electrically connect to a line power bus or a load power bus.

22. The multi-pole medium voltage vacuum circuit interrupter of Claim 15 wherein said elongated housing is an insulated housing.

23. The multi-pole medium voltage vacuum circuit interrupter of Claim 15 wherein said elongated housing has a generally cylindrical shape; and wherein said elongated housing of one of said circuit interrupter poles includes a first support member proximate the first end of said elongated housing and a second support member proximate the opposite second end of said elongated housing, with each of said first and second support members including a first cutout to hold the generally cylindrical shape of said one of said circuit interrupter poles proximate one of the first and second ends of said elongated housing, and with each of said first and second support members further including at least one second cutout to hold the generally cylindrical shape of at least another one of said circuit interrupter poles proximate one of the first and second ends of said elongated housing.